

REMARKS

Claims 1 to 3, 6, 8 to 12, 20 and 21 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

Claims 1 to 3, 8 to 12 and 21 were rejected under §103(a) as being unpatentable over Baker, U.S. Patent No. 4,936,811, in view of Devers, U.S. Patent No. 6,672,596. Claims 13 and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP '464. Claims 16 to 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP '464 further in view of Devers.

The allowability of claim 13 has been withdrawn. Claim 6 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. §112, first paragraph.

Claims 8, 20 and 21 have been canceled.

Reconsideration of the application is respectfully requested.

Rejections under 35 U.S.C. §112, first paragraph

Claims 1 to 3, 6, 8 to 12, 20 and 21 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Claims 8, 20 and 21 have been canceled.

Support in the specification for claims 1 to 3, 6 and 8 to 12 is found in paragraph [0031] which specifically states "In the exemplary embodiments shown in the figures, compensating pieces 6 *and* 6' each include a radial supporting web 11 that is used for transferring the clamping force from clamp 7 to connecting collar 5." (Emphasis added). **It is thus explicitly clear from the specification that the clamp 7 shown in Fig. 1 is used to clamp the Fig. 5 and 7 embodiments with compensating pieces 6'.** Nothing in the specification contradicts this explicit disclosure, nor does the Office Action point to anything. Withdrawal of the rejection is respectfully submitted.

Rejections under 35 U.S.C. §103(a)

Claims 1 to 3, 8 to 12 and 21

Claims 1 to 3, 8 to 12 and 21 were rejected under §103(a) as being unpatentable over Baker, U.S. Patent No. 4,936,811, in view of Devers, U.S. Patent No. 6,672,596.

Baker discloses segmented band sections 30 that are longitudinally aligned over the sleeve 15 and housing 16 such that the tongues 34 and grooves 36 intermesh to form the band 22. The tongue and groove design of the band 22 permits the circumferential movement of the band 22 thereby isolating the clamp from having excessive loads applied thereto by movement of the joint 10.

Devers discloses a seal adaptor comprising an annular body 41 having a specifically configured inner surface 42 that conforms to the shape of the non-uniform outer surface 36. The seal adaptor assembly includes wall segments 42a-l that define a plurality of pockets 43. Each of these pockets is filled with a general trapezoidally shaped cup-like insert. Each insert 44 is selected to have a rigidity greater than that of the material of the annular body 41 of the seal adaptor assembly 40.

Devers further discloses that the seal adaptor assembly 40 can be assembled by a method as set-forth herein by virtue of having enough pliability to be pulled over the end 12a of the housing 12 until the specifically configured inner surface 42 thereof is located to conform to the non-uniform surface 36 of the housing 12. The inserts 44 can be assembled either prior to fitting of the seal adaptor assembly 40 on the housing 12 or thereafter. If preassembled the inserts can be premolded into the pockets, if post assembled the inserts can be pressed or snapped into the pockets after the seal adaptor assembly is connected to the housing.

Claim 1 provides an axle boot for joint sealing, comprising:

a joint housing including an external contour having a plurality of radial recesses;

a substantially axisymmetric bellows including an integral connecting collar formed as a single piece, the connecting collar including a plurality of indentations projecting radially inward, each indentation adapted to one of the radial recesses;

a plurality of compensating pieces connected to one another by a plurality of ring sections to form a single piece component surrounding an outer circumference of the connecting collar, the single piece component having a cylindrical outer circumferential surface, wherein at least one of the ring sections is elastically deformable sufficient to enable the single piece component to expand to a circumference larger than the outer circumference of the connecting collar; and

a circumferential clamp surrounding and contacting the single piece component.

As admitted by the Office Action, Baker does not show “wherein at least one of the ring sections is elastically deformable sufficient to enable the single piece component to expand to a circumference larger than the outer circumference of the connecting collar.”

In fact, a main purpose of Baker is to avoid such elasticity: “since the segments [sections 30] are *individually* free to move into the axially concave outer depression of the joint, the clamping force is effectively transmitted to the boot itself.” Column 2, lines 64 to 68 (emphasis added). Baker specifically teaches away from the elastomeric deformable solutions as discussed at col. 1, line 41 to col. 2.

There is also absolutely no reason or teaching or motivation in Devers or any other prior art to modify Baker to provide “at least one of the ring sections [being] elastically deformable sufficient to enable the single piece component to expand to a circumference larger than the outer circumference of the connecting collar” as the entire purpose of Baker is to permit the sections 30 to be individually free to move with respect to one another. This is also clear from claim 1 of Baker which “a plurality of *individual and separate* band sections.”

It is respectfully submitted that a fair reading of both Baker and Devers shows that there is absolutely no reason one of skill in the art would have connected the individual and separate pieces of Baker in an elastically deformable manner.

Moreover, Baker desires that the tongue and groove design permit “circumferential movement of the band 22.” See column 4, lines 38 to 40. To have provided elastic deformability in place of the tongue and groove design would have made such circumferential movement difficult or impossible, as the elastic material would bulge. The Office Action does not address this argument.

Withdrawal of the rejections to claim 1 and its dependent claims under 35 U.S.C. §103(a) is respectfully requested.

Claims 13 and 15

Claims 13 and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP ‘464.

JP ‘464 discloses a band for a tri-pod type universal joint. The device is used to clamp a boot to a tri-pod universal joint. The device features a band or a clamp portion of a boot.

Claim 13 recites an axle boot for joint sealing, comprising:

a joint housing including an external contour having a plurality of radial recesses;
a substantially axisymmetric bellows including an integral connecting collar formed as a single piece, the connecting collar including a plurality of indentations projecting radially inward, each indentation adapted to one of the radial recesses;
a plurality of compensating pieces disposed adjacent an outer surface of the connecting collar so as to form a cylindrical outer circumferential surface; and
a circumferential clamp disposed adjacent an outer surface of the connecting pieces, wherein the connecting pieces are connected to the clamp as an integrated multi-component unit; wherein each of the plurality of compensating pieces are connected to the clamp using at least one rivet.

JP '464 does not appear to be rivotable. It is not clear how rivots would be used to connect the pieces shown. There is no reason or motivation to use rivots especially given the form and shape of pieces 28 and 14.

With further respect to claim 15, claim 15 recites "a circumferential length of each of the plurality of compensating pieces corresponds approximately to a circumferential length of an associated radial recess." JP '464 does not show or teach this limitation, nor is there any reason, teaching or motivation to modify JP '464 so "a circumferential length of each of the plurality of compensating pieces corresponds approximately to a circumferential length of an associated radial recess."

Claims 16 to 19

Claims 16 to 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP '464 further in view of Devers.

JP '464 and Devers are discussed above.

Claim 16 recites "each compensating piece includes a more than one material component, each of the material components having a different hardness."

There is no teaching, suggestion or motivation to combine the band of JP '464 with the seal adaptor assembly in Devers. There is no reason one of skill in the art would have combined the rigid material inserts from Devers with the band of JP '464.

With further respect to claim 19, claim 19 recites “each of the plurality of compensation pieces includes at least one radial supporting web.” Neither JP ‘464 nor Devers show or teach this limitation nor does the prior art provide any suggestion or motivation to do so.

Withdrawal of the rejections to claim 13 and its dependent claims under 35 U.S.C. §103(a) is respectfully requested.

CONCLUSION

The present application is respectfully submitted as being in condition for allowance and applicants respectfully request such action.

Respectfully submitted,

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